

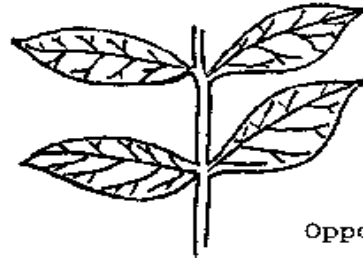


TREES OF
ILLINOIS
AND
THEIR
USES

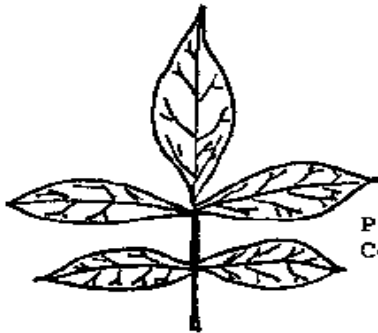
LEAF FORMS AND ARRANGEMENT



Simple



Opposite



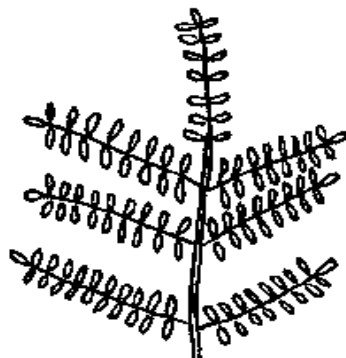
Pinnately
Compound



Alternate



Palmately
Compound

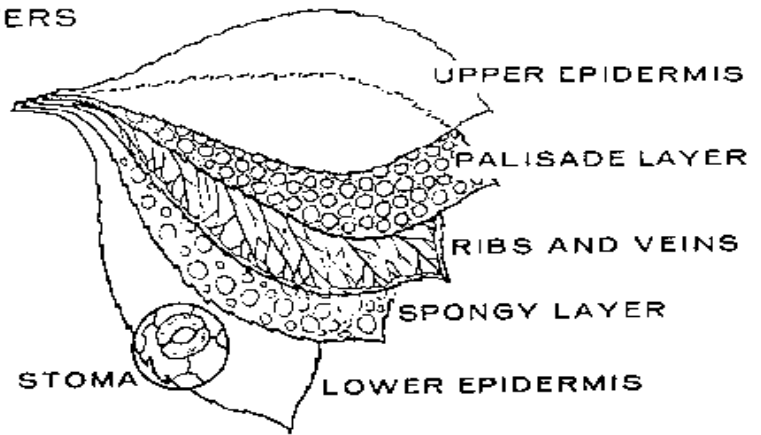
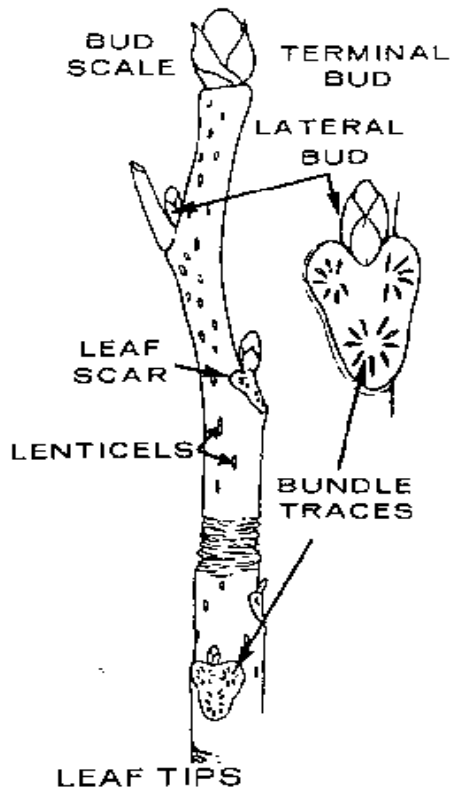


Doubly
Pinnately
Compound



Whorled

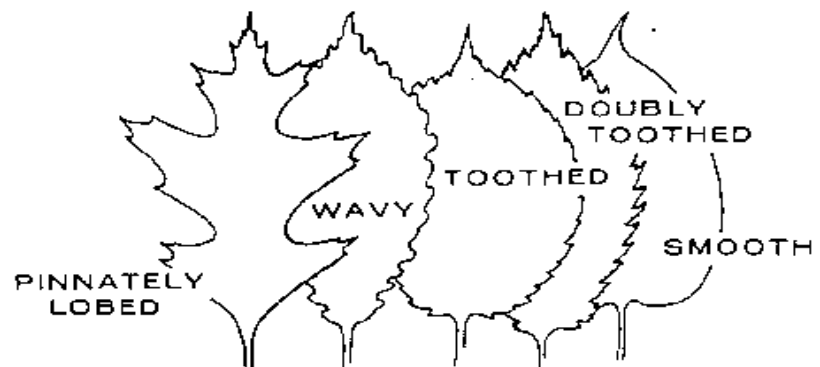
WINTER TWIG CHARACTERS



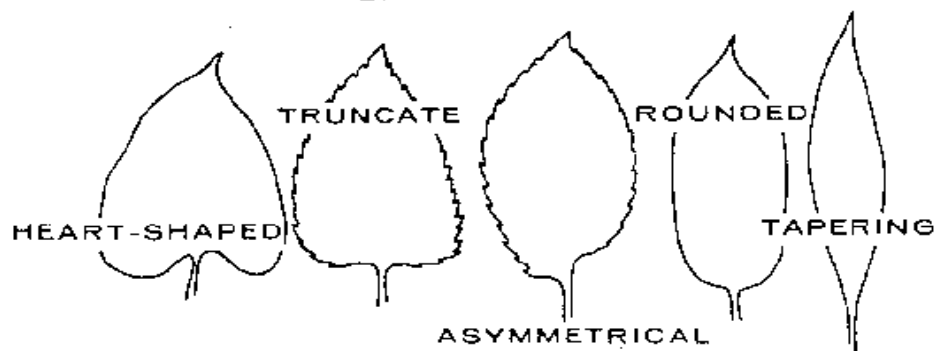
LEAF TIPS



LEAF EDGES



LEAF BASES



ASH, GREEN
Fraxinus pennsylvanica

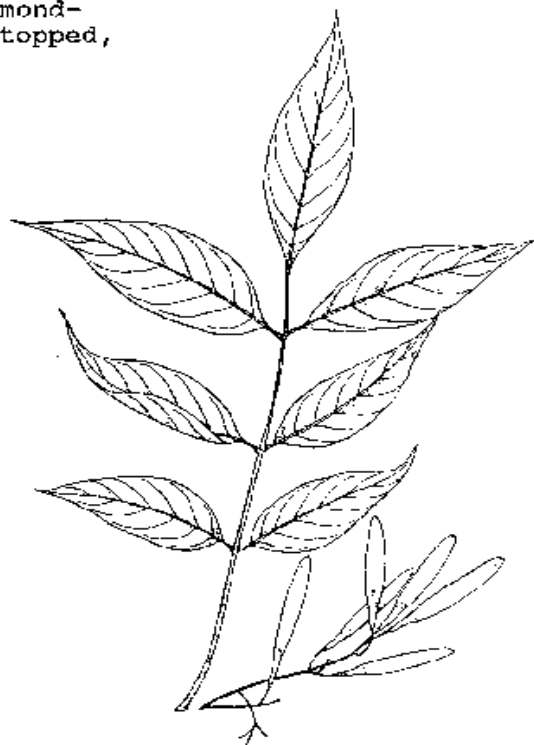
Medium tree up to 60 feet; trunk diameter up to 2.5 feet.

Bark: Light or dark gray, with diamond-shaped furrows between flat-topped, sometimes scaly, ridges.

Leaves: Opposite, pinnately compound, with 7-9 leaflets. The leaflets turn reddish-brown or yellowish in the fall. Green and smooth on both surfaces.

Wood: Hard, heavy, strong, and light brown.

Uses: Interior finishing, tool handles, baseball bats, oars, paddles, sometimes grown as an ornamental.



Notes: The most widespread native ash. Most successful hardwood in the Great Plains Shelterbelt. Hardy, fast-growing, planted on spoil banks after strip mining.



CHERRY, BLACK
Prunus serotina

Other names: Rum, or Whiskey Cherry.

Medium tree up to 75 feet; trunk
diameter up to 3 feet.

Bark: Thin, smooth, reddish-brown
at first, becoming deeply furrowed
and black.

Leaves: Alternate, simple. Green,
smooth, and shiny on the
upper surface, paler and
smooth on lower surface
except for rusty hairs
along the veins.

Wood: Light weight, hard, strong,
close-grained, light reddish-
brown.

Uses: Cabinets, caskets, interior
finishing.



Notes: With the exception of black walnut, the black cherry is the most valuable hardwood of the eastern United States. All parts of the tree yield hydrocyanic acid when steeped in warm water. However, medicinal properties are destroyed by boiling. A cough medicine or tea was prepared by Indians and our colonial ancestors for various ailments. Wine and jelly can be made from the fruit.



COTTONWOOD
Populus deltoides

Other names: Big or Yellow Cottonwood,
Carolina or Necklace Poplar,
Cotton-tree, Whitewood.

Large, rapidly growing tree up to 100 feet;
trunk diameter up to eight feet.

Bark: Smooth and gray when young,
becoming furrowed at maturity.

Leaves: Alternate, simple.
Green, smooth, and
shiny on the upper
surface, paler on the
lower surface.

Wood: Light weight, soft,
readily warping.

Uses: Pulpwood, fuel.



Notes: One of the largest and fastest growing trees in Illinois,
but short-lived. The largest tree in Illinois, in Grundy County
is a Cottonwood measuring 28 feet 6 inches in circumference.



DOGWOOD, FLOWERING
Cornus florida

Small to medium tree up to 40 feet;
trunk diameter rarely more than 2 feet.

Bark: Brown, divided into squarish plates.

Leaves: Opposite, simple.
Green and smooth or
sparsely hairy on the
upper surface, pale and
finely hairy or sometimes
smooth on the lower surface.

Wood: Hard, strong, heavy,
close-grained, brown.

Uses: The wood is used in the
making of tool handles,
although the real value
of the Flowering Dogwood
is its ornamental potential.



Notes: Indians used the aromatic bark and roots as a remedy for malaria fever, extracted the red dye from the roots, and used the twigs in cleaning their teeth. The regularity of its blossoming caused the Indians to plant their corn when the blossoms appeared.



ELM, AMERICAN
Ulmus americana

Other names: White, River, Water, or Soft Elm.

Large tree up to 80 feet tall;
trunk diameter up to 4 feet.

Bark: Light or dark gray,
furrowed, at maturity
breaking into thin plates.

Leaves: Alternate, simple.
Upper surface dark
green and smooth,
the lower surface
pale and either softly
hairy or smooth.

Wood: Heavy, strong, pale brown.

Uses: Flooring, farm implements,
shipbuilding, ornamental
shade tree, but decreased in
number by the Dutch Elm disease.



Notes: Dutch Elm disease, caused by a fungus introduced
accidentally about 1930 and spread by European and native elm
bark beetles have ravaged many of these once abundant trees. The
Iroquois Indians of Western New York used the bark for canoes and
twisted it into ropes.



ELM, SLIPPERY
Ulmus rubra

Other names: Red Elm

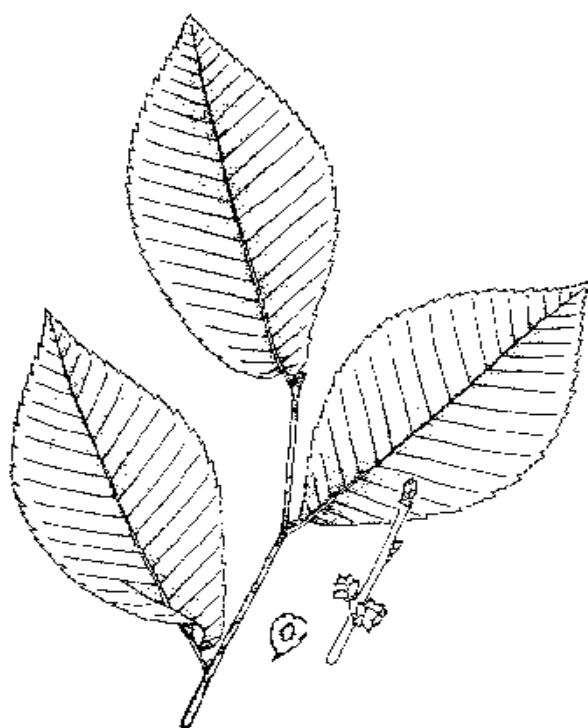
Moderate tree up to 80 feet;
trunk diameter to 4 feet.

Bark: Reddish-brown to gray,
with shallow furrows;
the inner bark becomes
slippery when chewed.

Leaves: Alternate, simple.
Upper surface green and
very rough, lower surface
smooth or hairy.

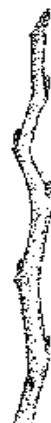
Wood: Heavy, strong, dark
brown.

Uses: Shipbuilding, farm
implements, fence
posts.



NOTES:

Latin species name *rubra* refers to the large brown buds covered with rust-colored hairs. The thick, slightly fragrant, edible, glue-like inner bark is dried and afterwards moistened for use as a cough medicine or as a poultice.



HACKBERRY
Celtis occidentalis

Other names: Sugarberry, Nettle tree, Hoop Ash.

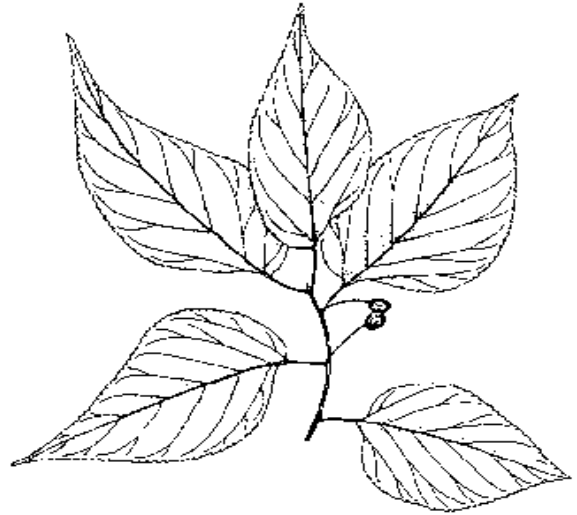
Medium or large tree up to 80 feet,
trunk diameter up to 5 feet.

Bark: Gray, smooth on young trees
and soon bearing "warts,"
becoming rough and scaly on
old trees.

Leaves: Alternate, simple.
Smooth or more often
rough-hairy on one or
both surfaces.

Wood: Heavy, soft, close-grained,
pale yellow.

Uses: Fence posts, crates,
barrel hoops, furniture.



Notes: Branches often become deformed bushy growths called
"witches brooms" produced by mites and fungi.



HICKORY, SHAGBARK
Carya ovata

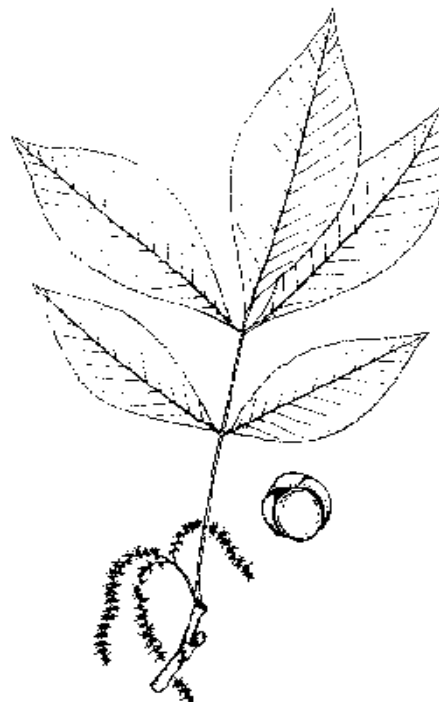
Medium to large tree up to 80 feet;
trunk diameter up to 3.5 feet.

Bark: Gray, separating into long,
shreddy scales giving the trunk
a shaggy appearance.

Leaves: Alternate, pinnately
compound, 5-7 leaflets.
Green or yellow-green and
smooth on the upper surface,
paler and smooth or somewhat
hairy on the lower surface.

Wood: Heavy, hard, light brown,
close-grained.

Uses: Tool handles, fuel, the
nuts are tasty.



Notes: The name "hickory" is from paw cohiccora, the American Indian word for the oily food removed from pounded kernels steeped in boiling water. This sweet hickory "milk" was used in cooking corn cakes and hominy. Pioneers made a yellow dye from the inner bark.



HICKORY, SWEET PIGNUT
Carya ovalis

Other names: False Shagbark,
small-fruited Hickory

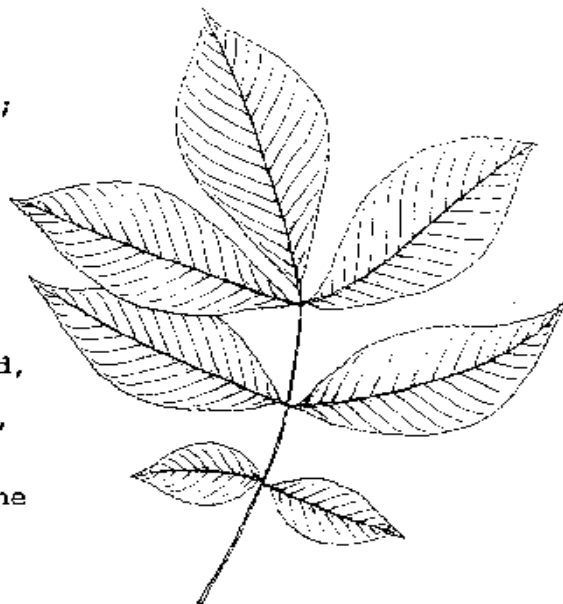
Medium to large tree up to 80 feet tall;
trunk up to 2 feet in diameter.

Bark: Gray, tight and rather smooth
when young, usually peeling off
into narrow plates at maturity.

Leaves: Alternate, pinnately compound,
with usually 7, sometimes 5,
leaflets; leaflets lance-shaped,
somewhat rounded at the base,
finely toothed along the edges,
green and smooth on the upper
surface, minutely dotted and
sometimes with some hairs on the
lower surface.

Wood: Heavy, hard, brown.

Uses: Tool handles, fuel.



Notes: Named in colonial times from the consumption of the small
nuts by hogs. Early settlers called it "Broom Hickory" for they
made brooms from the narrow splits of the wood. It was formerly
used for wagon wheels and textile loom picker sticks because it
could withstand tremendous vibrations.



LOCUST, BLACK
Robinia pseudoacacia

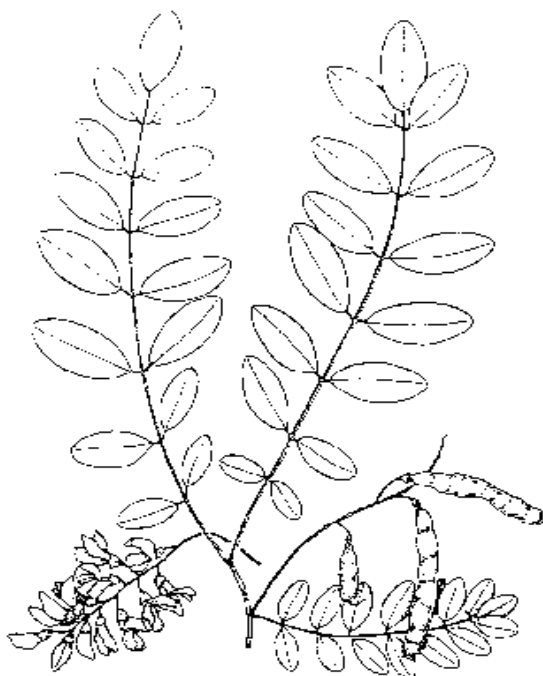
Moderate tree up to 70 feet;
trunk diameter up to 2.5 feet.

Bark: Gray or black, deeply
furrowed, with numerous
elevated, scaly ridges.

Leaves: Alternate, pinnately
compound, with 7-21
leaflets. Blue-green
and smooth on the
upper surface, paler
and smooth on the
lower surface.

Wood: Hard, heavy, strong,
brown.

Uses: Fence posts, tool-handles,
ornamental tree.



Notes: Rapid growth in youth, but short-lived. Virginia
Indians used it to make bows, British colonists at Jamestown
discovered this species in 1607 and named it for its resemblance
to the Old World Locust.



LOCUST, HONEY
Gleditsia triacanthos

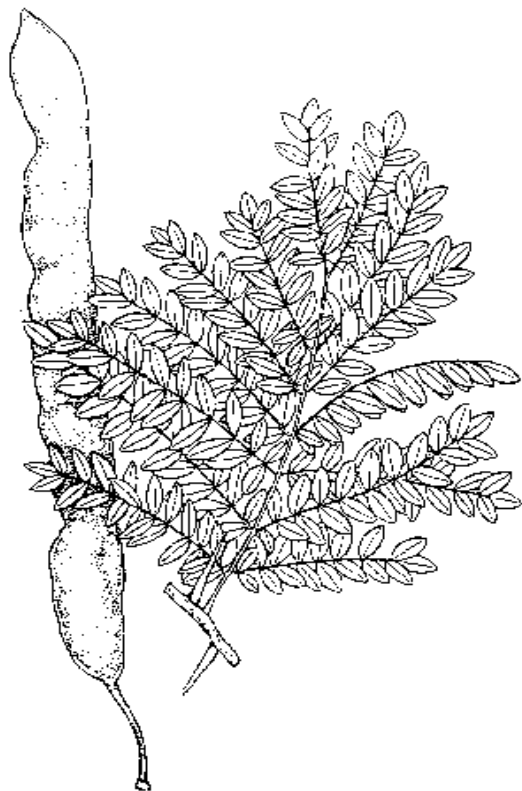
Medium tree up to 70 to feet;
trunk diameter up to 3 feet.

Bark: Dark brown, deeply
furrowed and scaly
at maturity.

Leaves: Alternate, doubly
pinnately compound.
Smooth except for
some hairs along
the veins.

Wood: Hard, strong, coarse-
grained, reddish-brown.

Uses: Fence posts, coarse
construction; a spineless;
form sometimes cultivated.
Not often used as an ornamental
because of their numerous
thorns.



Notes: The thorns have been used by woodsmen for pins,
spearpoints, and animal traps. Livestock and wildlife consume
the honey-like sweet pulp of the pod.



MAPLE, SILVER
Acer saccharinum

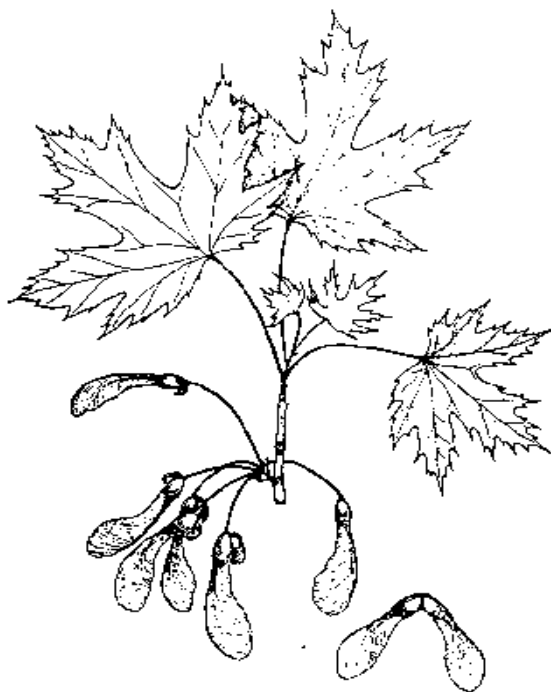
Medium to large tree up to 100 feet; trunk diameter up to 5 feet.

Bark: Gray or silvery, smooth at first, becoming loose and scaly or even somewhat shaggy when old.

Leaves: Opposite, simple. Pale green and smooth on the upper surface, silvery-white and usually smooth on the lower surface.

Wood: Hard, close-grained, pale brown.

Uses: Furniture, grown as an ornamental, but the branchlets are brittle.



Notes: Yields a sugar of good quality but the yield is usually 50% less than that of sugar maple. Rapid growth makes it a popular shade tree, but brittle branches are easily broken in windstorms.



MAPLE, SUGAR
Acer saccharum

Medium to large tree up to 80 feet; trunk diameter up to 3 feet.

Bark: Gray to dark brown to black, becoming furrowed and scaly.

Leaves: Opposite, simple. Dark green and smooth on the upper surface, green or paler on the lower surface and usually smooth, or sometimes hairy on the veins.

Wood: Heavy, strong, close-grained, light brown.

Uses: Furniture, interior finishing, cabinets; maple sugar, ornamental.



Notes: The boiled concentrated sap is the commercial source of maple sugar and syrup, a use colonists learned from the Indians. Each tree yields between 5 and 60 gallons of sap per year (32 gallons of sap make one gallon of syrup or 4.5 pounds of sugar). Several Indian tribes used the dried inner bark for making bread.



OAK, PIN
Quercus palustris

Medium tree up to 75 feet tall;
trunk diameter usually less than
3 feet.

Bark: Light brown or dark brown,
scarcely furrowed.

Leaves: Alternate, simple.
Dark green, shiny
and more or less
smooth on the upper
surface, paler and
with tufts of hairs
along the vein on
lower surface.

Wood: Hard, heavy, coarse-
grained, pale brown.

Uses: General construction,
fuel, fence posts,
ornamental.



Notes: Many of the lower branches die and their stubs are the
"pins" which give the tree its name. The fibrous root system
without a distinct taproot makes transplanting easy.



OAK, SHINGLE
Quercus imbricaria

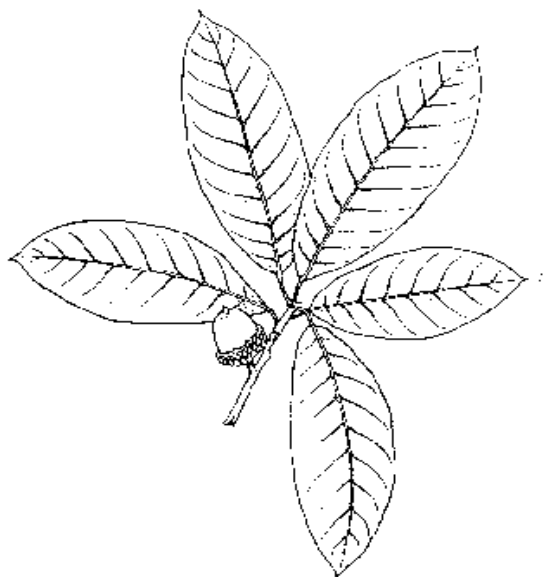
Medium tree up to 70 feet;
trunk diameter up to 3 feet.

Bark: Dark brown, deeply furrowed
between flat, tight plates.

Leaves: Alternate, simple. Dark
green, smooth and shiny
on the upper surface,
paler and hairy on the
lower surface.

Wood: Hard, heavy, coarse-grained,
light reddish-brown.

Uses: Shingles, general
construction.



Notes: The Latin species name *imbricaria*, meaning "overlapping," and the common name both refer to use of the wood for shingles by the pioneers, a practice still continued in some areas today. An ornamental and shade tree, it is suitable for hedges, screens and windbreaks.



OAK, WHITE
Quercus alba

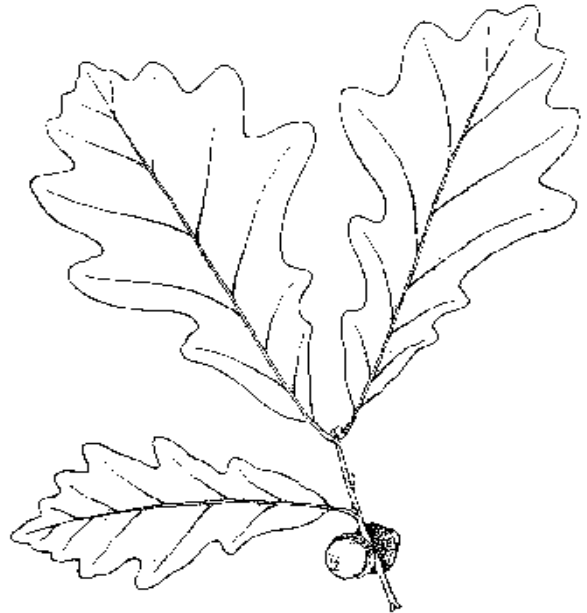
Large tree up to 100
feet; trunk diameter
up to 3 feet.

Bark: Gray or whitish
with gray patches,
shallowly furrowed.

Leaves: Alternate, simple.
Upper surface green
and smooth, the lower
surface paler and smooth.

Wood: Heavy, hard, strong,
durable, coarse-grained,
pale brown.

Uses: Interior finishing,
cabinets, general
construction, fence
posts, fuel, tight
cooperage.



Notes: Oak bark contains from 6-11% tannin, the agent that gives it its property of drying up body tissues, was used for astringent, tonic and antiseptic purposes in American medicine. The acorns were the most important nut food of most Indian tribes, especially in bread. To render tender nutmeat palatable, it was first necessary to remove the bitter, constipating tannin.



OSAGE ORANGE
Maclura pomifera

Other names: Hedge Apple, Bow Wood.

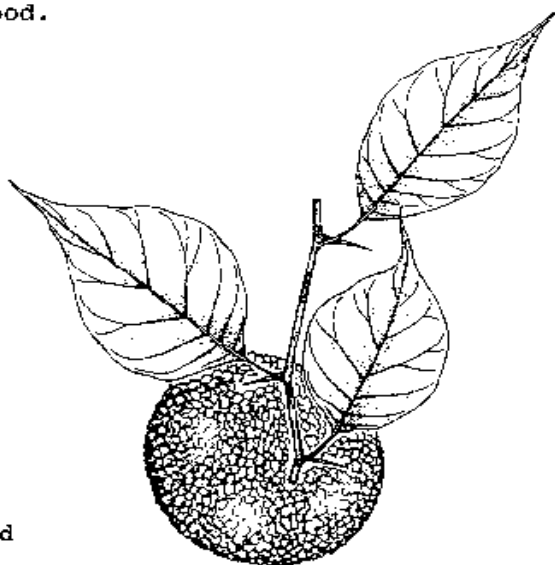
Medium tree to 40 feet;
trunk diameter up to one foot.

Bark: Light gray-brown
tinged with orange,
separating into shaggy
strips.

Leaves: Alternate, simple,
green and smooth
on both sides.

Wood: Heavy, hard, flexible,
durable, coarse-grained,
orange when first cut,
becoming brown.

Uses: Bows, fence posts, railroad
ties, tool handles; often
planted as a windbreak.



Notes: Indians used the wood for their finest bows. Early colonists extracted a yellow dye from the root bark. Fruit fed to livestock earned the name "Horse-apple."



PERSIMMON

Dioapyros virginiana

Medium tree up to 50 feet;
trunk diameter up to one foot.

Bark: Dark gray to black,
broken at maturity
into squarish blocks.

Leaves: Alternate, simple.
Dark green, smooth,
and shiny on the upper
surface, paler and
smooth on the lower
surface.

Wood: Heavy, hard, the heartwood
nearly black.

Uses: Golf club heads, billiard
cues; edible fruit.



Notes: American Indians made persimmon bread and stored the dried fruits like prunes. The word "persimmon" is of Algonquin origin while the genus name *dioapyros*, from the Greek, means "fruit of the god Zeus." The immature fruit contains tannin and is strongly astringent.



REDBUD
Cercis canadensis

Other name: Judastree

Small tree up to 35 feet;
trunk diameter up to one foot.

Bark: Reddish-brown, separating
into long plates and thin scales.

Leaves: Alternate, simple.
Blades heart-shaped, contracted
to a short point at the tip.
Smooth on the upper surface,
smooth or with some hairs on the
lower surface.

Wood: Hard, heavy, close-grained,
dark reddish-brown.

Uses: Ornamental tree



Notes: The flowers can be eaten as a salad or fried. According to a myth, Judas Iscariot hanged himself on the related Judas tree of Western Asia and Southern Europe, after which the white flowers turned red with shame or blood. As a result, it is called the "Judas-tree."



SASSAFRAS

Sassafras albidum

Other names: Saxifraxtree,
Sassafac,
Aguetree,
White Sassafras,
Red Sassafras.

Usually small to moderate tree
up to 40 feet; trunk diameter
up to 2 feet.

Bark: Greenish-gray when young,
becoming deeply furrowed
and dark reddish-brown
when older.

Leaves: Alternate, simple.
Three shapes: 3-lobed,
2-lobed, & some unlobed.
Green and smooth on upper
surface, paler and either
smooth or hairy on lower
surface.

Wood: Soft, brittle, orange-brown.

Uses: Fence posts, the roots are used
to make tea.



Notes: Most Indian tribes of the Eastern United States Utilized the plant for one ailment or another. Sassafras became one of the most important articles of export early in the history of the nation, the bulk of the shipments going to England for use in treating colic, venereal disease, pain, etc.



SYCAMORE

Platanus occidentalis

Other names: Buttonwood,
Buttonball-tree,
Plane, Planetree,
Whitewood, Water Beech,
Virginia Maple.

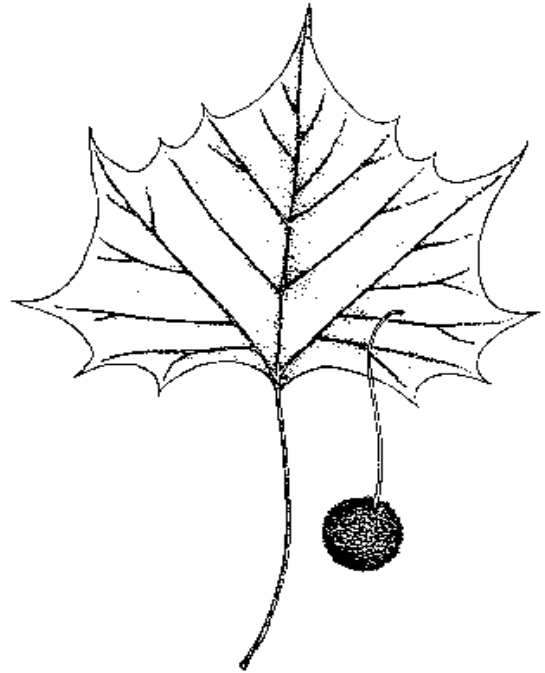
Large tree sometimes more than
100 feet; trunk diameter up to 8 feet.

Bark: Reddish-brown when young,
quickly breaking into thin,
flat scales, falling away in
sections to expose large
patches of whitish or greenish
inner bark.

Leaves: Alternate, simple.
Bright green and smooth
on upper surface, paler
and smooth on lower
surface except for sparsely
hairy veins.

Wood: Hard and strong.

Uses: Furniture, butchers block,
interior finishing,
ornamental tree.



Notes: Grows to a larger trunk diameter than any other native
hardwood. The present champion's trunk is about 11 feet in
diameter, an earlier giant's was nearly 15 feet.



TULIP TREE
Liriodendron tulipifera

Other names: Yellow Poplar,
Popple,
Cancewood,
Whitewood.

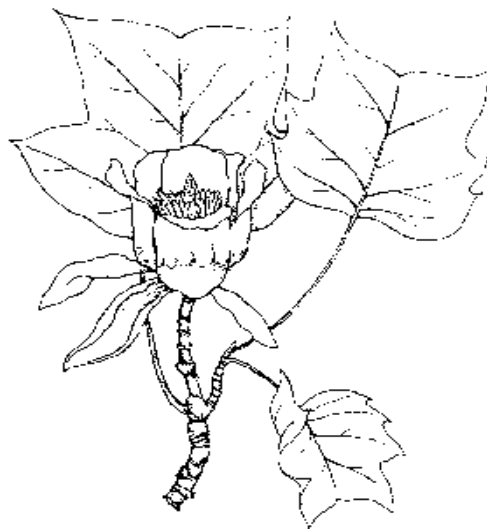
Stately tree up to 100 feet;
trunk diameter up to 4 feet.

Bark: Grayish, becoming
furrowed at maturity;
furrows often whitish
within.

Leaves: Alternate, simple.
Bright green.
Conspicuous notch at tip.

Wood: Soft, durable.

Uses: Lumber pulpwood, early water
pipes, veneer cores to which
other wood can be glued, canoes,
and frames.



Notes: The inner bark contains tulipiferine which reportedly
exerts powerful effects on the heart and nervous system. The
powdered bark has been used for rheumatism and digestive
problems.



WALNUT, BLACK
Juglans nigra

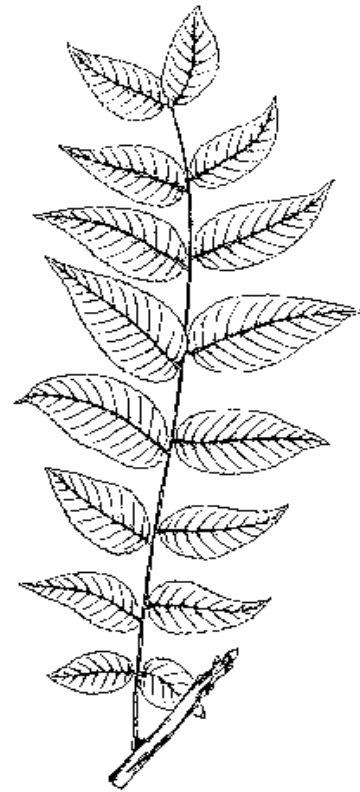
Large tree up to 150 feet;
trunk diameter up to 5 feet.

Bark: Black, thick, deeply
furrowed.

Leaves: Alternate, pinnately
compound. 15-24 leaflets.
Yellow-green and smooth
on the upper surface, paler
and hairy on the lower surface,
turning yellow in the Fall.

Wood: Hard, heavy, coarse-grained,
dark brown.

Uses: Furniture, interior finishing,
cabinets, edible nut.



Notes: Most valuable tree found in Illinois originally growing
extensively throughout Illinois. Has provided blackish dye made
from the husks since colonial days.

